

**Notice of Allowability**

Application No.

10/085,031

Examiner

ALEXANDER BOAKYE

Applicant(s)

WANG, YANG

Art Unit

2616

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/12/2007.
2. ☒ The allowed claim(s) is/are 1,4-24,26-30; renumbered as 1-27 respectively.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                      |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|  | 9. <input type="checkbox"/> Other _____.   |

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. John E. Harrity on 12/12/2007.

#### In the Claims:

1. (currently amended) A router system comprising:  
  
a plurality of virtual routers, at least one virtual router of the plurality of virtual routers is configured to operate as a backbone router and at least one other virtual router of the plurality of virtual routers is configured to operate as a regional router; at least one resource shared by the plurality of virtual routers; and a resource allocator configured to control access to the at least one resource by the at least one virtual router of the plurality of virtual routers and the at least one other virtual router of plurality of virtual routers based on security information and priority information.
  
15. (currently amended) A method for configuring a router system, comprising:

configuring a plurality of virtual routers, at least one virtual router of the plurality of virtual routers being configured to operate as a backbone router and at least one other virtual router of the plurality of virtual routers being configured to operate as a regional router; defining at least one resource to be shared by the plurality of virtual routers; [[and]] creating a router profile for each of the plurality of virtual routers, the router profile including security information and priority information; and controlling access to the at least one resource by the at least one virtual router of the plurality of virtual routers and the at least one other virtual router of the plurality of virtual routers based on the security information and the priority information.

23. (currently amended) In a router system, a method for controlling allocation of a group of shared resources by a plurality of virtual routers, the method comprising: receiving, at a resource allocator, a request for allocation of one shared resource of the group of shared resources from at least one virtual router of the plurality of virtual routers, the request including security information and priority information; determining, at the resource allocator, whether the request is authentic based on the security information; [[and]] granting, at the resource allocator, [the request] access to the one shared resource by the at least one virtual router of the plurality of virtual routers, when the request is authentic and based on the priority information.

#### REASONS FOR ALLOWANCE

2. The following is an examiner's statement of reasons for allowance: Claims 1,4-26 are considered allowable since when reading the claims in light of the specification none of the references of record alone or in combination disclose or suggest the combinations of limitations specified in the independent claims. As to claims 1, 4-14, the prior art of record does not teach a resource allocator configured to control access to the at least one resource by the at least one virtual router of the plurality of virtual routers and at least one other virtual router of plurality of virtual routers based on security information and priority information. As to claims 15-22, the prior art of record does not teach creating a router profile for each of the plurality of virtual routers, the router profile including security information and priority information; and

controlling access to the at least one resource by the at least one virtual router of the plurality of virtual routers and the at least one other virtual router of the plurality of virtual routers based on the security information and the priority information.

As to claims 23-4, 26, the prior art of record does not teach determining, at the resource allocator, whether the request is authentic based on the security information; granting, at the resource allocator, access to the one shared resource by the at least one virtual router of the plurality of virtual routers, when the request is authentic and based on the priority information. As to claims 27-29, the prior art of record does not teach a resource allocator configured to receive a request for access to the at least one resource and grant access to the at least one resource to

one of the plurality of virtual routers based on the security level and resource sharing priority associated with the one virtual router. As to claim 30 the prior art of Record does not teach a resource allocator configured to control access to the at least one resource by the first virtual router and the second virtual router based on security information and priority information. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Boakye whose telephone number is (571) 272-3183. The examiner can normally be reached on M-F from 8:30am to 6:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham, can be reached on (571) 272-3179. The Fax number is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or PUBLIC PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Electronic Business Center (EBC)** numbers at 866-217-9197 and 703-305-3028.

Alexander Boakye

Patent Examiner

AB

12/12/07

  
CHI PHAM  
SUPERVISORY PATENT EXAMINER  
12/14/07